

**REMARKS**

Claims 1-19 are all of the claims presently pending in the application. Claims 1-8 have merely been editorially amended, and have not been amended to more particularly define the invention or to overcome the Examiner's rejection. Claims 9-19 have been added to claim additional features of the invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicants specifically state that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-8 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Vazan (U.S. Patent No. 6,753,897).

This rejection is respectfully traversed in the following discussion.

**I. THE CLAIMED INVENTION**

The claimed invention (e.g., as defined in claim 1) is directed to a method of arranging a number of LEDs. The method includes storing characteristic values of each of the LEDs measured in a characteristic measurement, temporarily keeping the LEDs after storing the characteristic values, and rearranging the LEDs to make the characteristic values of adjacent LEDs substantially equal.

In conventional methods, after characteristics of produced LEDs are inspected, the LEDs are arranged in inspecting order or at random and supplied to the customer. Results of the characteristic inspection are ranked in grades by a certain characteristic. Each of the ranks is considerably wide. Therefore, when a plurality of LEDs of the same rank in light intensity are arranged in use, there may be a disadvantage that light intensity varies because an LED high in light intensity in the rank and an LED low in light intensity in the rank are arranged so as to be adjacent to each other.

The claimed invention of exemplary claim 1, on the other hand, provides a method of arranging a number of LEDs including rearranging the LEDs to make the characteristic values of adjacent LEDs substantially equal (see Application at page 3, lines 9-17). This allows

adjacent LEDs to emit light in a uniform manner without variation (see Application at page 4, lines 1-5).

## II. THE PRIOR ART REFERENCE

The Examiner alleges that Vazan teaches the claimed invention of claims 1-8. Applicants submit, however, that there are elements of the claimed invention, which are neither taught nor suggested by Vazan.

Vazan teaches normalizing the properties of the LEDs by using an offset value stored in a memory, so that the LEDs emit light uniformly. The current input to the LEDs is adjusted.

In contrast, in the present invention, the LEDs are not necessarily normalized. However, the LEDs may be arranged in a suitable manner based on the different properties of the LEDs.

That is, Vazan does not teach or suggest “*rearranging said LEDs to make said characteristic values of adjacent LEDs substantially equal*” as recited in claim 1 (and similarly recited in claim 5).

The Examiner attempts to rely on column 6, lines 7-15, column 3, line 60 and column 4, line 3 of Vazan to support his allegations. Specifically, the Examiner relies upon column 6, line 15 and column 4, line 3 of Vazan as teaching rearranging the LEDs to make the characteristic values of adjacent LEDs substantially equal. The Examiner, however, is clearly incorrect.

That is, nowhere does Vazan teach or suggest rearranging the LEDs to make the characteristic values of adjacent LEDs substantially equal. Indeed, Vazan does not even mention rearranging the LEDs, let alone teach or suggest the limitation recited in the claimed invention. Vazan merely teaches adjusting the output of the LEDs.

Vazan is directed to a method for maintaining LED printbar uniformity and equalization throughout the operating life of the printbar. The method includes determining and storing initial correction data for the LED printbar in a correction memory. The contents of the correction memory are used to control the illumination of the LEDs in the printbar (see Vazan at column 2, lines 13-20). During an initial calibration, the light output of the LEDs in the printbar is measured. From this initial measurement a set of correction data is determined

and stored. The correction data is used later to normalize the output of the LEDs (see Vazan at column 3, lines 54-63).

As the LEDs in the printbar age, the output power of the LEDs diminishes. The output light intensity of the LEDs is compared to a uniform light intensity. The correction data is then used to adjust the output intensity of the LEDs to compensate for loss of power (see Vazan at column 4, lines 41-45).

In contrast, the claimed invention teaches rearranging the LEDs to make the characteristic values of adjacent LEDs substantially equal. Vazan clearly does not teach altering the arrangement of the LEDs in the printbar. The arrangement of the LEDs in the printbar of Vazan remains constant. Vazan merely teaches adjusting the output of the LEDs.

Therefore, Applicants submit that there are elements of the claimed invention that are not taught or suggested by Vazan. Therefore, Applicants respectfully request the Examiner to withdraw this rejection.

### **III. NEW CLAIMS**

New claims 9-19 have been added to claim additional features of the present invention and to provide more varied protection for the present invention. These claims are independently patentable because of the novel features recited therein.

Applicants respectfully submit that new claims 9-19 are patentable over any combination of the applied references at least for analogous reasons to those set forth above with respect to claim 1-8.

### **IV. FORMAL MATTERS AND CONCLUSION**

In view of the foregoing, Applicants submit that claims 1-19, all of the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Date: 2/28/05

Respectfully Submitted,



Scott M. Tulino, Esq.  
Registration No. 48,317

Sean M. McGinn, Esq.  
Registration No. 34,386

McGinn & Gibb, PLLC  
Intellectual Property Law  
8321 Old Courthouse Road, Suite 200  
Vienna, VA 22182-3817  
(703) 761-4100  
Customer No. 21254